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Task-02: Image to Pencil Sketch

SIMPLBYTE

Import Libraries

In [1]:

```python
import numpy as np
import pandas as pd
import matplotlib.pyplot as plt
import cv2
```

Import Image and Display Original Image

In [2]:

```python
image=cv2.imread(r"C:\Users\chenn\Downloads\shahrukh-khan Image.jpg")
image = cv2.cvtColor(image, cv2.COLOR_BGR2RGB)
plt.figure(figsize=(8,8))
plt.imshow(image)
plt.title("Original image")
plt.axis("off")
plt.show()
```
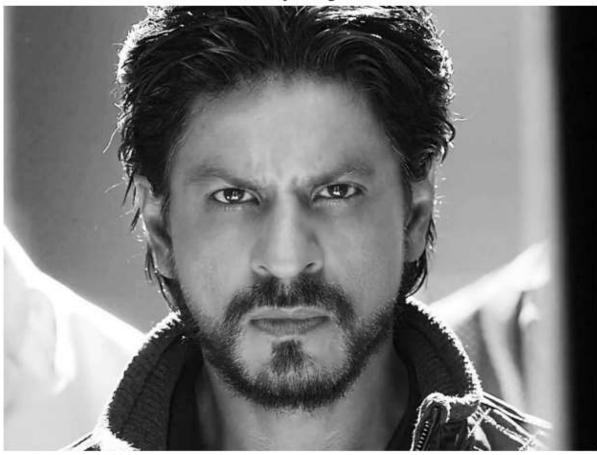

Original image

Convert Original image to Gray scale Image

In [3]:
```python
Gray_image = cv2.cvtColor(image, cv2.COLOR_BGR2GRAY)
plt.figure(figsize=(8,8))
plt.imshow(Gray_image,cmap='gray')
plt.title("Gray image")
plt.axis("off")
plt.show()
```


Gray image

Convert Gray Scale image to Inverted Image

In [4]:
```python
inverted_image = cv2.bitwise_not(Gray_image)
plt.figure(figsize=(8,8))
plt.imshow(inverted_image,cmap='gray')
plt.title("Inverted image")
plt.axis("off")
plt.show()
```

Inverted image

Inverted image to smoothening Image

In [5]:
```python
Smoothening_image = cv2.GaussianBlur(inverted_image,(21,21),sigmaX=0,sigmaY=0)
plt.figure(figsize=(8,8))
plt.imshow(Smoothening_image,cmap='gray')
plt.title("Smoothening image")
plt.axis("off")
plt.show()
```
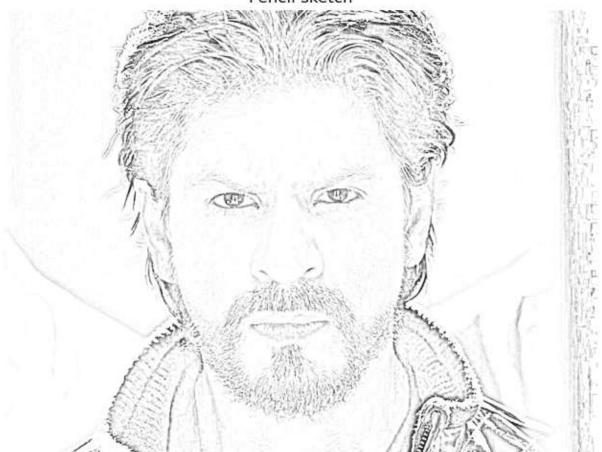
Smoothening image

Image to pencil Sketch image

In [10]:
```python
pencil_sketch = cv2.divide(Gray_image,255-Smoothening_image,scale=255)
plt.figure(figsize=(8,8))
plt.imshow(pencil_sketch,cmap='gray')
plt.title("Pencil sketch")
plt.axis("off")
plt.show()
```

Pencil sketch

Thank You

In [ ]: